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Role of Neuropeptide Y in Myocardial Contractility of Rats during Early Postnatal Ontogeny

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Abstract

© 2014, Springer Science+Business Media New York. We studied the effect of neuropeptide Y in concentrations of 10^{-10}-10^{-6} M on myocardial contractility of rats at the age of 7, 21, and 100 days. Studying the isometric contraction of myocardial strips showed that neuropeptide Y decreases the force of myocardial contraction in 7-day-old rat pups. Exogenous neuropeptide Y produced a biphasic effect in 21-day-old rats, which was manifested in the increase and subsequent decrease in myocardial contractility. Neuropeptide Y had little effect on myocardial contractility of 100-day-old animals.

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Keywords

heart, myocardial contractility, neuropeptide Y, ontogeny